

REMARKS

The above-identified application is United States application serial number 10/697,821 filed on October 29, 2003. Claims 1-25 are pending in the application. Claims 1-25 are rejected.

Rejection of Claims under 35 U.S.C. §112

Claim 22 is rejected under 35 U.S.C. §112, first paragraphas failing to comply with the written description requirement. Applicants have amended Claim 22 so that the claim is supported by the specification. Applicants respectfully request entry of the amendment to put the application in better form for appeal.

Rejection of Claims under 35 U.S.C. §102

Claims 1-4 and 10-13, 18-22 and 24-25 are rejected under 35 U.S.C. §102(e) as being anticipated by Belsan et al. (US Patent No. 5,403,639). The rejections are improper at least because Belsan does not disclose "a storage array comprising a cabinet [and] . . . storage devices contained within the cabinet of at least three different and distinct controller-to-storage device bus interface technology types." Accordingly, applicants disclose a storage array contained within a single cabinet that include at least three different and distinct bus interface technology types. The file server system (1) disclosed by Belsan is silent with regard to containment within a single cabinet and relates to multiple different contained devices that intercommunicate. Applicants' claimed system that includes devices with multiple different bus interface technology types in a single contained array enables extra storage space to be accessed without constraints of LUN copy licenses, pre-assignment, or pre-configuration for unexpected and temporary or critical usage within a storage array.

KOESTNER BERTANI LLP
291 MARVIN ST
SUITE 150
IRVINE, CA 92612
TEL (949) 351-0350
FAX (949) 221-0200

In contrast, Belsan discloses, as shown in Figures 1 and 2, storage array units that individually contain only a single controller-to-storage device bus interface technology type in addition to a cache type. Column 4, for example at lines 34-38 and 60-64, of Belsan describes combinations of media of different types in distinct

arrays and devices, but not a single, contained disk array that includes multiple bus interface technology types.

Column 3, lines 30-35, of Belsan describes "media used to store the data can be a disk array or any other media or combination of media such as a disk array in combination with a backend automated magnetic tape cartridge library system including a plurality of tape drives such that the file server system comprises a hierarchical data storage system containing multiple types of media" which relates to combinations of media of different types in distinct arrays and devices, but does not describe a single, contained disk array that includes multiple bus interface technology types.

Belsan in Figure 2 and described in column 8, lines 15-20, clearly shows that the magnetic tape cartridges 10a and 10b are outside and separate from the data storage subsystem 100 and individual disk arrays 103-1. The Belsan description of Figure 2 in column 8, lines 29-48, teaches disk drives 122-1 to 125-r as significantly less expensive than typical form factor disk drives. However, the "less expensive" drives 122-1 to 125-r are the only drives in the array 100 so that Belsan does not describe a single, contained disk array that includes multiple bus interface technology types.

The claimed combination of an hierarchy of storage types within an individual array enables allocation of storage for different purposes without the overhead of network communication in systems such as that shown in Belsan in which the different storage technologies are in separate arrays.

Rejection of Claims under 35 U.S.C. §103

Claims 5-9, 14-17 and 23 are rejected under 35 U.S.C. §103 (a) as being unpatentable over Belsan et al. (U.S. patent No. 5,403,639) in view of Lee et al. (US Patent No. 7,047,358). The rejections are improper because Belsan in view of Lee which do not disclose "a storage array comprising a cabinet [and] . . . storage devices contained within the cabinet of at least three different and distinct controller-to-storage device bus interface technology types."

KOPPELBERG BERTANI LLP
2102 MARTIN ST
SUITE 110
IRVINE, CA 92612
TEL (949) 251-2210
FAX (949) 251-0260

RECEIVED
CENTRAL FAX CENTER

OCT 14 2008

CONCLUSION

The application, including all remaining Claims 1-25, is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned at (949) 251-0250.

I hereby certify that this correspondence is being
facsimile transmitted to the USPTO (571) 273-8300 on
the date shown below:

(Signature)

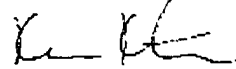
Joy C. Ngo

(Printed Name of Person Signing Certificate)

October 14, 2008

(Date)

Respectfully submitted,



Ken J. Koestner
Attorney for Applicant(s)
Reg. No. 33,004

KOESTNER BORGAN LLC
2192 MARTIN ST
SUITE 150
LA JOLLA, CA 92037
TEL (949) 251-0250
FAX (949) 251-0250